REMARKS

The Applicants request reconsideration of the rejection.

Claims 1-19 are pending, and were rejected under 35 U.S.C. 102(e) as being anticipated by Midgley et al., U.S. 6,460,055 (Midgley). The Applicants traverse as follows.

Midgley is directed to systems and methods for backing up data files, and describes a replication backup system that runs a synchronization replication process and a dynamic replication process. The synchronization replication process creates a baseline image that replicates on a backup server, data structures that have been selected by a user to be backed up, and the dynamic replication process monitors in real time file input/output calls associated with these data structures, to thereby capture changes being made to these data structures and making these same changes to the replicated image of these files on the backup server, to maintain the replicated data structure on the backup server as a mirror image of the data on the computer network.

Fig. 2 of Midgley depicts pictorially the replication of selected source data files from server 22. The selected source data files are replicated within cache memory 16 of a backup server 12. Specifically, Fig. 2 depicts a data

structure 52 that is stored within a data storage device 32 connected to the server 22.

Fig. 2 also depicts that the cache storage device 16 of the backup server 12 stores a data structure 54 that provides a replicated copy of the data structure 52. Thus, Midgley's systems and methods employ replication technology to back up data on a computer network creating and maintaining an image of the backed up data from a source system to a backup or target system, using replication of the data structure 52 as data structure 54. Further, Fig. 2 depicts a tape storage library 14 that maintains a plurality of versions of the replicated data structure 54 as versions 58a, 58b, and 58c representative of replication performed at different points in time.

Fig. 2 also shows a profile file 50 associated with data structure 52. The profile file is generated by a console system 24 shown in Fig. 1 and includes information that identifies the data maintained by the server 22 to be backed up, as well as storing information as to how the backup process is to operate. The profile file 50 is created by a user in a procedure where the user employs a graphical user interface to select the data files or directories,

subdirectories, or other data structures that are to be replicated.

Fig. 3 shows in greater detail an example of a profile file 50. The profile file 50 includes a source data file selection field 68, a select timing field 80, and a select overwrite mode field 82. The data source selection field 68 stores information and presents a data structure 70 that includes a plurality of data files arranged in a directory and subdirectory structure. The user may draw a box around a set of data files to be selected for being backed up, as shown by box 74 placed around a portion of the data structure 70. Data files that are contained within the box 74 are selected to be backed up, and files that fall outside of the box are excluded from being backed up.

Once the data source files have been identified by the user, the process backup system employs a synchronization replication process 40 to create a replicated image of the selected data source files at the backup server 12. Optionally, the backed up files can be written to long term storage, in tape storage library 14.

Turning to independent Claim 1, the claimed invention is directed to a computer system comprising first and second servers and a storage system connected to the servers. The

first server includes a memory storing a first program, which is executed by a first CPU. The second server comprises a second memory that stores a second program executed by a second CPU.

According to the invention, the second server requests the first server for information necessary for the second server to back up a file that is logically set with a path to the first server when the request is made. In other words, a file stored with a path to the first server is to be backed up, not by the first server, but by the second server. Thus, the second server requests the information necessary for the backup to be performed.

In response to the request, the first server sends an identifier of a second storage device that stores duplicate data of the file to be backed up. The second server obtains backup data from the duplicate data from the second storage device, based on the identifier. That is, the first server informs the second server of an identifier of duplicate data of the desired file, and then the second server obtains the backup data accordingly.

In rejecting Claim 1, the Office Action cites Midgley at column 8, lines 2-14 and 28-47 as disclosing the claimed first and second servers. These passages broadly set forth

Midgley's servers 18, 20 and 22 and associated data storage devices 38, 34, and 32. The Office Action does not state which server of Midgley corresponds to the claimed first server, or which server of Midgley corresponds to the claimed second server.

In rejecting the functionality of the first and second programs, and the functional relationships between the first and second servers, the Office Action refers to column 12, lines 33-66. This passage generally describes that Midgley permits the user to either overwrite a complete new copy of a source data file during synchronization, or to select that only changes between the source data file and the target data file be written to the target data file during synchronization. The passage does not disclose or suggest a program that comprises a part for making a request to the first server for information necessary for the second server to back up a file as a backup object instead of the first server, a part which responds to the request by sending the second server an identifier of a second storage device that stores duplicate data of the file, or a part which obtains backup data from the second storage device, based on the identifier.

It appears that the Office Action asserts that Midgley's profile performs the functions of synchronization in correspondence with the claimed backing up. However, profile 50 is entered at console 24, which is not a server otherwise involved in the synchronization or backing up of data according to Midgley. Even if console 24 were considered to be, for example, the claimed second server, console 24 does not request information from the server 22 (to be backed up in the illustrated example) for information necessary for the console 24 to back up a file as a backup object instead of the server 22. Alternatively, if one were to consider console 24 as the claimed first server, with backup server 12 as the claimed second server, the patent does not disclose that backup server 22 requests console 24 for information necessary for the backup server 12 to back up a file as a backup object instead of console 24.

As a matter of course, Midgley does not disclose that a server corresponding to the claimed first server responds to the request by sending an identifier of a second storage device that stores duplicate data of the file to be backed up, or the second server obtains backup data from the second storage device based on the identifier. Instead, Midgley describes a process in which the user selects files to be

backed up, either by complete overwriting or by selection of changes-only modification of target files, which in any case does not correspond to the requesting for and responding with an identifier of a second storage device that stores duplicate data of the file to be backed up. In fact, Midgley appears to disclose only the backing up of the source file itself or changes thereto with respect to communication between the servers.

Even in backing up a replicated data file to the tape library, there is no transfer of requests and information between servers as required by Claim 1. Therefore, although the Office Action is somewhat unclear as to the application of Midgley to Claim 1, the Applicants respectfully submit that Midgley does not teach the invention as set forth in the original claim.

The Applicants note that Claim 1 has been amended to clarify that the second program comprises a part for making a request to the first server for information necessary for the second server to backup a file as a backup object, the file being logically set with a path to the first server when the request is made. This clarification is not seen to change the scope of the claim, but emphasizes that the first server is not the server performing the backup; instead, the second

server performs the backup of a file accessed normally by the first server.

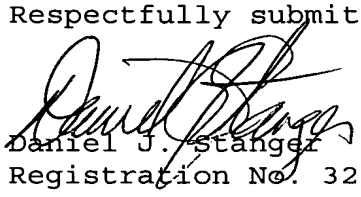
Independent Claim 7 is directed to the first server, and has been amended for clarity as well. Independent Claim 10 is directed to the second server, with appropriate amendments for clarity. Independent Claim 14 is directed to a backup method having steps that are similar to the functionality of Claim 1.

Therefore, each of the pending independent claims is patentably distinguishable from Midgley for reasons similar to those advanced above in the argument for patentability of Claim 1.

Each of the dependent claims has separate patentability, but will not be discussed at this time for brevity. The Applicants note that each of the dependent claims inherits the patentable features of the respective independent claims.

In view of the foregoing amendments and remarks, the Applicants request reconsideration of the rejection and allowance of the claims.

Respectfully submitted,



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